fed with alkali and heat treated pericarp exhibited decrease in food intake and weight gain. Biochemical and hematological analyses revealed increase in cholesterol, alkaline phosphatase, total protein and eosinophils. The heat treated pericarp group had an increase in bilirubin and decrease in blood platelets. Congestion and oedema in small intestine and lungs, hepatocellular and renal tubular cells vacuolation were observed in all experimental rats. The data suggest that treatments were unable to inactivate the toxic compounds present in the *J. curcas* pericarp.

Work supported with grants from CNPq and CAPES.

doi:10.1016/j.toxlet.2011.05.442

P1209
Life+ project: Population exposure to PAHs (EXPAH)

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Purpose: EXPAH project financed by European Community with LIFE+ funds aims at identifying and quantifying population exposure among children and elderly people to carcinogenic PAHs in particulate matter in highly urbanized areas. The main goal of the project will be the health impact assessment of PAHs. An integrated approach, based on measurements and modeling techniques, will be used to estimate the spatial distribution of population exposure to PAHs, to identify key determinants of high exposures and to estimate potential health effects on the target population. In this paper, we summarize the component of the project consisting of in field campaigns for estimating the actual concentration of PAHs in different areas of the city and for assessing the actual human exposure in different living places (microenvironments). *Methods*: Measurements will be performed by means of low volume PM2.5 sampling devices in stationary outdoor and indoor locations, such as houses and schools, and by means of PM2.5 personal exposure measurements of volunteers selected between children and elderly people. The sampling will be performed in the city of Rome on a daily period during two seasonal weeks. *Results of the study*: Results of the in field campaigns will be addressed to: develop an outdoor–indoor infiltration model; estimate the mean exposure of the target populations to PAHs using data from the air pollution model, infiltration models and population time-activity patterns through an exposure model; evaluate the extent of outdoor–indoor PAHs infiltration;evaluate the population exposure to PAHs.

doi:10.1016/j.toxlet.2011.05.443

P1210
How to enhance the hydrophobic nature of ionic liquids while lowering their toxicity?

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Ionic liquids (ILs) are a novel promising class of solvents with interesting physicochemical properties. Many different applications have been described as alternatives to organic solvents in chemical processes. Despite their low vapor pressure, even the water immiscible ILs shown some solubility in water that allows their dispersion into the aquatic systems resulting in water contamination. This work aims at enlarging the restricted knowledge about the ILs toxicity and inhibitory effects in aquatic ecosystems and to investigate the possibility of designing hydrophobic ionic liquids of low toxicity.

In this context, biological assays were performed using organisms of different trophic levels, such as the decomposer *Vibrio fischeri*, the producer *Pseudokirchneriella subcapitata* and the first consumer *Daphnia magna*.

This study reports a set of toxicity results, which correspond to aromatic and non-aromatic immiscible ILs, through the use of different cations (pyridinium, piperidinium, pyrrolidinium and imidazolium) and hydrophobic anions (bis(trifluoromethylsulfonyl)imide [NTf_2] and hexafluorophosphate [PF_6]).

doi:10.1016/j.toxlet.2011.05.444

P1211
Survival and life history responses of *Simocephalus vetulus* (Müller, 1776) genotypes exposed to sodium chloride: Does environmental context matter?

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Cladocerans are typically viewed as freshwater organisms with importance as regulators of primary production. However, populations of these filter-feeders can be found in brackish ecosystems, facing regular or sporadic inputs of seawater. According to climate change predictions, saline intrusion may affect vulnerable freshwater habitats. Nonetheless, populations adapt to local conditions and this may confound our ability to assess noxious effects of salinity. Bearing this in mind, our goal was to analyze the halotolerance of different genotypes of *Simocephalus vetulus* differing in their original environmental context (brackish versus freshwater populations). Clonal lineages were established from three extant populations: one from a brackish lagoon and two from freshwater systems. To assess short-time sensitivity of 23 genotypes to NaCl, they were exposed to a range of concentrations from 2 to 5 $g\,L^{-1}$ in standard 48-h acute assays and to a fixed concentration of 6 $g\,L^{-1}$ in 12-h survival time (ST) trials. Life-history responses